

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

IN RE LIBOR-BASED FINANCIAL
INSTRUMENTS ANTITRUST LITIGATION

MDL No. 2262, 11 Civ. 2613

THIS DOCUMENT RELATES TO: EXCHANGE-
BASED PLAINTIFF ACTION

METZLER INVESTMENT GmbH, *et al.*

Plaintiffs,

v.

CREDIT SUISSE GROUP AG, et al.,

Defendants.

**EXCHANGE-BASED PLAINTIFFS' MEMORANDUM OF LAW IN SUPPORT OF
MOTION TO EXCLUDE THE OPINIONS OF CHRISTOPHER CULP**

TABLE OF CONTENTS

PRELIMINARY STATEMENT	1
STATEMENT OF FACTS	2
ARGUMENT	5
I. Legal Standard	5
II. Dr. Culp's Opinions Are Contrary to Known Facts	6
A. Dr. Culp's Opinions Are Directly Contrary to Documents Published by the CME	7
B. Dr. Culp's Opinions Contain Mathematical and Logical Errors	9
CONCLUSION.....	13

TABLE OF AUTHORITIES

Cases

<i>Amorgianos v. Nat’l R.R. Passenger Corp.</i> , 303 F.3d 256 (2d Cir. 2002)	5, 6, 9
<i>Arista Records LLC v. Usenet.com, Inc.</i> , 608 F. Supp. 2d 409 (S.D.N.Y. 2009)	5
<i>In re Blood Reagents Antitrust Litig.</i> , 783 F.3d 183 (3d Cir. 2015)	5
<i>Borgognone v. Trump Plaza</i> , No. 98 Civ. 6139, 2000 WL 341135 (E.D.N.Y. Mar. 9, 2000)	6
<i>Cedar Petrochemicals, Inc. v. Dongbu Hannong Chem. Co., Ltd.</i> , 769 F. Supp. 2d 269 (S.D.N.Y. 2011)	5
<i>Daubert v. Merrell Dow Pharm., Inc.</i> , 509 U.S. 579 (1993).....	<i>passim</i>
<i>Heller v. Shaw Indus., Inc.</i> , 167 F.3d 146 (3d Cir. 1999)	9
<i>Li v. Aponte</i> , No. 05 Civ. 6237, 2009 WL 1285928 (S.D.N.Y. May 5, 2009).....	9
<i>Macaluso v. Herman Miller, Inc.</i> , No. 01 Civ. 11496, 2005 WL 563169 (S.D.N.Y. Mar. 10, 2005)	6
<i>Major League Baseball Properties, Inc. v. Salvino, Inc.</i> , 542 F.3d 290 (2d Cir. 2008)	9
<i>In re Mirena IUD Prods. Liability Litig.</i> , 169 F. Supp. 3d 396, 411 (S.D.N.Y. 2016)	5
<i>Scott v. Chipotle Mexican Grill, Inc.</i> , 315 F.R.D. 33 (S.D.N.Y. 2016).....	6
<i>Teamsters Local 445 Freight Div. Pension Fund v. Bombardier Inc.</i> , 546 F.3d 196 (2d Cir. 2008)	5
<i>Travelers Indem. Co. v. Northrop Grumman Corp.</i> , 3 F. Supp. 3d 79 (S.D.N.Y. 2014), <i>aff’d</i> , No. 15 Civ. 3117, 2017 WL 391926 (2d Cir. Jan. 27, 2017)	6

<i>In re U.S. Foodservice Inc. Pricing Litig.</i> , 729 F.3d 108 (2d Cir. 2013)	5
<i>United States v. Williams</i> , 506 F.3d 151 (2d Cir. 2007)	5
<i>Wal-Mart Stores, Inc. v. Dukes</i> , 564 U.S. 338 (2011).....	5
<i>Zhao v. Kaleida Health</i> , No. 04 Civ. 467, 2008 WL 346205 (W.D.N.Y. Feb. 7, 2008)	6
Rules	
Fed. R. Civ. P. 702.....	<i>passim</i>
Fed. R. Civ. P. 23	2

The Exchange-Based Plaintiffs (“Plaintiffs”) by and through their undersigned counsel, respectfully submit this memorandum of law in support of their motion to exclude the opinions of defendant Cooperatieve Rabobank U.A. (f/k/a Cooperatieve Centrale Raiffeisen-Boerenleenbank B.A.) (“Rabobank”)’s proffered expert, Christopher Culp (“Dr. Culp”), regarding his opinions on the economic causality argument between spot LIBOR and Eurodollar futures prices and the mathematical connection between spot LIBOR and expected future spot LIBOR found at paragraphs 16-37, 40, 92-111, 187-222, 271-78, 349, and 352-64 of the Expert Report of Christopher Culp, Ph.D dated April 3, 2017 (the “Culp Report”) and paragraphs 5-6, 8-12, 20-22, 25-28, and 51-56 of the Sur-Rebuttal Expert Report of Christopher Culp, Ph.D, dated June 30, 2017 (“Culp Sur-Rebuttal Report”). For the reasons set forth below, Plaintiffs’ motion should be granted.

PRELIMINARY STATEMENT

The Court should exclude Dr. Culp’s opinions regarding his opinion that there is no relationship between spot LIBOR and expected future spot LIBOR. Dr. Culp submitted approximately 177 pages of testimony in connection with his opposition and sur-rebuttal report. Dr. Culp’s voluminous reports are replete with facts and figures supposedly describing the lack of connection between spot LIBOR and Eurodollar futures. Yet, Dr. Culp ignores critical logical and mathematical relationships tying the benchmark and futures contracts linked to it together. Defendants, their counsel, and the Chicago Mercantile Exchange (“CME”) all have previously acknowledged this fundamental relationship between LIBOR and Eurodollar futures. Dr. Culp’s oversight dislodges his opinions from empirical facts, thereby allowing them to float into the realm of speculation. Accordingly, Dr. Culp’s opinions concerning the connection between spot LIBOR and expected future spot LIBOR are unreliable under Rule 702 of the Federal Rules of Evidence

(“Rule 702”) and the Supreme Court’s *Daubert* standard and its progeny and should be excluded.

STATEMENT OF FACTS

Plaintiffs assume the Court’s familiarity with the facts of this case. In short, Plaintiffs allege that during the Class Period, Defendants manipulated BBA U.S. Dollar LIBOR to benefit their trading positions and engaged in the suppression of LIBOR.

On May 2, 2017, Plaintiffs filed their motion for class certification, requesting that the Court certify the case as a class action pursuant to Rule 23 of the Federal Rules of Civil Procedure. *See* ECF No. 1885. Prior to the filing of that motion, Plaintiffs served a series of class certification expert reports, including, *inter alia*, the Expert Report of Professor H. Nejat Seyhun, dated February 2, 2017 (the “Seyhun Report”). *See* Kovel Decl. Ex. G.¹

Professor Seyhun opined that manipulation of spot LIBOR results in the manipulation of Eurodollar futures and options on Eurodollar futures (“Eurodollar futures”) prices, using logic, economic theory, and empirical evidence. *See generally id.* ¶¶ 14, 103-149.

On April 3, 2017, Defendants introduced a number of expert reports, including, *inter alia*, the Culp Report. *See* Kovel Decl. Ex. H. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹ All references to the “Kovel Decl.” are to the Declaration of David E. Kovel filed contemporaneously herewith.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

As such,
they must be excluded under Rule 702 and *Daubert*.

ARGUMENT

I. Legal Standard

Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. The party offering an expert opinion has the burden of establishing its admissibility by a preponderance of the evidence. *See In re Mirena IUD Prods. Liability Litig.*, 169 F. Supp. 3d 396, 411 (S.D.N.Y. 2016). However, in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), the Supreme Court made clear that the district court is the “ultimate gatekeeper” under Rule 702, *United States v. Williams*, 506 F.3d 151, 160 (2d Cir. 2007), and is therefore required to “ensur[e] that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand,” *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 265 (2d Cir. 2002) (quoting *Daubert*, 509 U.S. at 597).²

The first step in determining whether an expert’s opinion is reliable under *Daubert* is “determining ‘whether the expert is qualified to testify.’” *Cedar Petrochemicals, Inc. v. Dongbu Hannong Chem. Co., Ltd.*, 769 F. Supp. 2d 269, 282 (S.D.N.Y. 2011) (quoting *Arista Records LLC v. Usenet.com, Inc.*, 608 F. Supp. 2d 409, 422 (S.D.N.Y. 2009)). Assuming the proffered expert is

² Although the “[t]he Supreme Court has not definitively ruled on the extent to which a district court must undertake a *Daubert* analysis at the class certification stage,” *In re U.S. Foodservice Inc. Pricing Litig.*, 729 F.3d 108, 129 (2d Cir. 2013), the Second Circuit and others - including the Supreme Court - have suggested that *Daubert* applies, *see id.* at 129-30; *Teamsters Local 445 Freight Div. Pension Fund v. Bombardier Inc.*, 546 F.3d 196, 208 n.15 (2d Cir. 2008) (class certification expert report “may be rejected . . . if it is methodologically unsound or unreliable”); *In re Blood Reagents Antitrust Litig.*, 783 F.3d 183, 187-88 (3d Cir. 2015) (collecting cases); *Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338, 354 (2011) (“[w]e doubt” district court’s statement that *Daubert* did not apply at class certification).

sufficiently qualified, the court must next consider “the [remaining] indicia of reliability identified in Rule 702, namely, (1) that the testimony is grounded on sufficient facts or data; (2) that the testimony is the product of reliable principles and methods; and (3) that the witness has applied the principles and methods reliably to the facts of the case.” *Amorgianos*, 303 F.3d at 265 (internal citations omitted).

Under the first prong of Rule 702, the court must “undertake a rigorous examination of the facts on which the expert relies.” *Scott v. Chipotle Mexican Grill, Inc.*, 315 F.R.D. 33, 43 (S.D.N.Y. 2016). Where an expert’s opinion is contrary to known facts or based upon “incorrect factual assumptions,” it must be excluded. *Macaluso v. Herman Miller, Inc.*, No. 01 Civ. 11496, 2005 WL 563169, at *8 (S.D.N.Y. Mar. 10, 2005) (excluding expert’s opinion because it was “contradicted by [plaintiff’s] own deposition testimony” and was “based on incorrect factual assumptions that rendered [it] . . . purely speculative”); see *Travelers Indem. Co. v. Northrop Grumman Corp.*, 3 F. Supp. 3d 79, 107-108 (S.D.N.Y. 2014), *aff’d*, No. 15 Civ. 3117, 2017 WL 391926 (2d Cir. Jan. 27, 2017) (precluding defendant’s expert’s opinion because it was contrary to the known facts in the testimony by the defendant’s former employee); *Zhao v. Kaleida Health*, No. 04 Civ. 467, 2008 WL 346205, at *8 (W.D.N.Y. Feb. 7, 2008) (precluding expert’s opinion where the “assumptions contained in his report [we]re directly contradicted by the [plaintiff’s] emails”); *Borgognone v. Trump Plaza*, No. 98 Civ. 6139, 2000 WL 341135, at *2, 4-5 (E.D.N.Y. Mar. 9, 2000) (precluding plaintiff’s expert’s opinion that at the time of the accident there were no handrails mounted on the wall because it was contradicted by testimony from defendant’s employee).

II. Dr. Culp’s Opinions Are Contrary to Known Facts

Dr. Culp’s opinions must be excluded under *Daubert* and Rule 702 because they are contrary to known facts, logically incoherent, and plainly incorrect, as demonstrated by simple arithmetic.

A. Dr. Culp's Opinions Are Directly Contrary to Documents Published by the CME

[REDACTED]

[REDACTED]

[REDACTED] An official publication of the CME regarding Eurodollar futures and the calculation of implied forward rates called "Understanding Eurodollar Futures" (attached to the Kovel Decl. as Ex. J) provides in the section "Implied Forward Rates" at page 3:

Much useful information regarding market expectations of future rate levels is embedded in the shape of the yield curve. But how might one unlock that information? The answer is found in the implied forward rate, or IFR. An IFR might be used to identify what the market believes that short-term rates will be in the future (e.g., what will 180-day investments yield 90 days from now?)...

The anticipated 90-day rate 90 days from now, or IFR(90,90) may be found as a function of the 90-day term rate $R(90)$ and the 180-day term rate $R(180)$. Let's denote the length of each period as $d1=90$ days; $d2=180$ days, and $d3=90$ days. A baseline assumption is that investors may be indifferent between investing for a 9-month term or investing at a 3-month term and rolling the proceeds over into a 6-month investment 90 days from now. As such, the IFR may be calculated as follows.

$$\text{IFR} = [1 + R(2) (d2/360)] / (d3/360) [1 + R(1)(d1/360)] - 1 / (d3/360)$$

Kovel Decl. Ex. J at 3.

Thus, the CME's publication also makes clear that the interest rate needed to price Eurodollar futures contracts mathematically related to spot LIBOR. Specifically, it is a weighted average of spot LIBOR. As the CME states: the anticipated 90-day rate 90-days from now, or IFR (90,90) is the interest rate needed to precisely price the futures contract. The CME also states that this interest rate is a mathematical function of the 90-day term rate $R(90)$ and the 180-day term rate $R(180)$ as specified above. Consequently, if spot LIBOR (either three month or six month) is also manipulated, then the interest rate needed to precisely price the futures contract is

also manipulated.

In the next section, “Mirror of Yield Curve,” the CME goes on to explain the arbitrage opportunities available in the daily marketplace based upon this mathematical relationship at page 4:

Eurodollar futures prices are a reflection of IFRs because of the possibility that market participants may pursue arbitrage opportunities when prices become misaligned....Presumably, arbitrageurs will continue to pursue this strategy until all the profitability has been “arbed” out of the situation. In other words, the net result of such transactions is that these related cash and futures markets achieve a state of equilibrium pricing where arbitrage opportunities do not exist and the market is reflective of ‘fair values.’

Id. at 4.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Because Dr. Culp’s opinions are not based on facts, they must be excluded under *Daubert*. See *Li v. Aponte*, No. 05 Civ. 6237, 2009 WL 1285928, at *6 (S.D.N.Y. May 5, 2009) (Buchwald,

³ [REDACTED]

⁴ See Mar. 5, 2013 Hr’g Tr. [ECF No. 325] (Robert Wise, Counsel for Defendants: “[E]ssentially what people are doing there is making bets, if you will. . . . [B]ut they’re taking a position with respect to where LIBOR is going, up or down.”)

d

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁵ Three-month spot LIBOR denote the three-month interbank deposit rate for the 91-day period covering the dates from March 14, 2008 to June 12, 2008 and six-month spot LIBOR denote the 6-month interbank deposit rate for the 182-day period covering the dates from March 18, 2008 to September 16, 2008.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

mean that expected future spot LIBOR is 100% manipulated. If only the three-month spot LIBOR were manipulated, then 95.6% of the expected future spot LIBOR must be necessarily manipulated.

of the LIBOR from March 18 to June 17, 2008 is a mathematical contradiction. To claim that there is no connection between investors' estimate of LIBOR from March 18 to June 17, 2008 and manipulated LIBOR going from March 14 to September 12 is simply a mathematical impossibility since the longer manipulated period covers 100% of the shorter horizon to price the Eurodollar futures contract. Rather, there is a direct, causal, mathematical relationship between spot LIBOR, expected future spot LIBOR at settlement, and the pricing of Eurodollar futures contracts.

Given this mathematical connection between Eurodollar futures prices and spot LIBOR, any manipulation in spot LIBOR must be incorporated into the Eurodollar futures prices. This is because both spot LIBOR and implied LIBOR - given the Eurodollar futures price - cover the same interest rates during the same dates.

CONCLUSION

For the foregoing reasons, Plaintiffs respectfully request that the Court grant Plaintiffs' Motion to Exclude the Opinion of Christopher Culp from the Court's consideration of Plaintiffs' motion for class certification.

Dated: July 10, 2017

KIRBY McINERNEY LLP

By: 

David E. Kovel
Karen Lerner
Thomas W. Elrod
Meghan J. Summers
825 Third Avenue, 16th Floor
New York, NY 10022
Telephone: (212) 371-6600
dkovel@kmlp.com
kloverner@kmlp.com
telrod@kmlp.com
msummers@kmlp.com

**LOVELL STEWART HALEBIAN
JACOBSON LLP**

By: /s/ Christopher Lovell

Christopher Lovell

Gary S. Jacobson

61 Broadway, Suite 501

New York, NY 10006

Telephone: (212) 608-1900

clovell@lshllp.com

gsjacobson@lshllp.com

Interim Lead Counsel for the Proposed Class